

REMARKS

The claims have been amended to more clearly define the invention as disclosed in the written description. In particular, claim 4 has been cancelled, while claims 1, 5 and 7 have each been amended to include the limitations of cancelled claim 4.

The Examiner has rejected claims 1-4 under 35 U.S.C. 103(a) as being unpatentable over U.S Patent 6,456,664 to Matsumura et al. in view of U.S. Patent 5,748,761 to Chang et al. The Examiner has further rejected claims 5 and 7 under 35 U.S.C. 103(a) as being unpatentable over Chang et al. in view of Matsumura et al.

The Matsumura et al. patent discloses a motion image encoder in which a coding circuit 1 calculates a variance and a SAD (Sum of Absolute Differences), the variance representing the sum of absolute differences each between a value of one of pixels in a block and a mean pixel value of the same block, and the SAD representing a magnitude of image variation between corresponding blocks of two consecutive frames. A selecting circuit 4 selects three largest SAD cumulative values, and the coding circuit 1 performs either intraframe or interframe coding on the blocks corresponding to the selected SAD's.

The Chang et al. patent discloses a method for segmenting and estimating a moving object motion in which a seed block detection process and a region growing process determine eight

motion parameters for each of the moving objects in the motion vector field.

The Examiner has further indicated that Chang et al. "teaches selecting a parts of the image area in which motion was determined in previous image data of a sequence of video images are take into account for determining parameter sets (Fig. 1, 100 to 103 to 104)."

Applicants submit that the Examiner is mistaken. In particular, as described in Chang et al. at col. 2, line 61 to col. 3, line 50, block 100 is a change detector which receives a current frame signal of a video signal and a reconstructed previous frame signal. Nothing else is stated with regard to the reconstructed previous frame signal, as such, it may only be conceived that the reconstructed previous frame signal results from a current frame signal having been delayed for 1 frame period. These two frame signals are also applied to a motion estimator 102 which estimates motion for selected pixels in a changed area of the current frame signal and previous frame signal, the changed area being based on an output from the change detector 100. Block 103 is a motion vector field detector which receives the motion vectors from motion estimator 102 and the changed area from change detector 100, and determines motion vectors for non-feature points in the changed area, and thereby outputs a motion vector field for the entire changed area. Block 104 is a seed block detection & region growing

circuit which segments the motion vector field into moving objects and describes each motion of the moving objects with a set of motion parameters.

Applicants submit that nowhere in Chang et al., and in particular, not in that shown in Fig. 1, is that any disclosure or suggestion that "of the selected parts, those parts of the image area in which motion was determined in previous video image data of a sequence of video images, are taken into account for determining the parameter sets", as specifically claimed in independent claims 1, 5 and 7.

In view of the above, Applicants believe that the subject invention, as claimed, is not rendered obvious by the prior art, either individually or collectively, and as such, is patentable thereover.

Applicants believe that this application, containing claims 1-3, 5 and 7, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

by 
Edward W. Goodman, Reg. 28,613
Attorney
Tel.: 914-333-9611